

What is claimed:

1. A method of making a laryngeal airway of the type that includes an inflatable positioning shield, the shield having a base and an inflatable, hollow, peripheral portion, the method comprising:

5 introducing at least one molding material onto internal walls of a mold;

wherein the mold has a cavity defined by the internal walls;

wherein the internal walls conform to external walls of the laryngeal airway; and

10 wherein a minimum amount of the molding material is introduced onto the internal walls of the mold that is necessary to create external walls of the laryngeal airway having a desired thickness; and
allowing the molding material to cure about the internal walls of the mold, thereby forming the laryngeal airway.

2. The method of claim 1 wherein the molding material is a paste.

15 3. The method of claim 1 further comprising removing the laryngeal airway from the mold.

4. The method of claim 1 wherein the base is inserted into the mold prior to introduction of the molding material into the mold.

5. The method of claim 4 wherein the base comprises a respiratory tube.

20 6. The method of claim 1 further comprising discarding excess molding material from the mold.

7. The method of claim 1 wherein the molding material is a liquid.

8. The method of claim 1 wherein the mold conforms to the external walls of the hollow peripheral portion of the inflatable positioning shield.

9. The method of claim 8 further comprising connecting the inflatable, hollow peripheral portion to the base.

5 10. The method of claim 7 wherein the inflatable, hollow peripheral portion is connected to the base before the molding material is allowed to cure.

11. The method of claim 7 wherein the inflatable, hollow peripheral portion is connected to the base after the molding material is allowed to cure.

10 12. The method of claim 7 wherein the connection is accomplished using heat, pressure, or an adhesive.

13. The method of claim 1 further comprising manipulating the mold to distribute the molding material about the internal walls of the mold.

14. The method of claim 1 wherein the molding material is polyvinylchloride.

15 15. The method of claim 1 wherein the molding material is a plastic.

15 16. The method of claim 1 wherein the internal walls of the mold conform to the external walls of a laryngeal airway that comprises an inflatable positioning shield and a respiratory tube, the inflatable positioning shield having an inflatable, hollow peripheral portion in fluid communication with the base, the base having a recessed front portion

that is sufficiently pliable to cup a patient's trachea after inflation of the inflatable

20 17. The method of claim 16 wherein the shield recess formed after inflation of the peripheral portion, and a rear portion formed between the base and the peripheral portion after inflation of the peripheral portion, the flexible respiratory tube having a proximal end lumen, a curved tubular body of sufficient size to permit passage of endo-tracheal tubes or related medical

instruments, and a distal end passing through and secured to the rear portion of the positioning shield, the distal end terminating at a distal lumen, the distal lumen passing through and secured to the rear portion of the positioning shield.

17. The method of claim 1 wherein the mold has internal walls that conform to
5 the external walls of the inflatable positioning shield.

18. The method of claim 17 further comprising connecting the inflatable positioning shield to the respiratory tube by ultra-sonic bonding.

19. The method of claim 18 wherein the connection is accomplished using heat, pressure or an adhesive.

10 20. The method of claim 1 wherein the molding material is at least one selected from the group consisting of polyvinylchloride, polyurethane, EVA, TPE, polyether block amide, a flexible plastic, a rubber material, silicone, combinations or mixtures thereof and the like.

15 21. The method of claim 1 wherein the step of introducing at least one molding material onto the internal walls of the mold is repeated after the molding material is allowed to cure.

22. The method of claim 1 further comprising warming the mold prior to introducing the molding material therein.

20 23. The method of claim 1 further comprising cooling the mold prior to introducing the molding material therein.

24. The method of claim 1 further comprising cooling the mold after the molding material is introduced therein.

25. The method of claim 1 further comprising warming the mold after the molding material is introduced therein.

26. The method of claim 1 wherein the molding material is introduced into the mold in an amount that is sufficient to form a laryngeal airway that has external walls about 0.5 to about 1.5 millimeters thick.

5 27. The method of claim 1 wherein the external walls of the laryngeal airway formed is about 0.5 to about 1.5 millimeters thick.

28. The method of claim 1 wherein the molding material is silicone.

29. A method of making a laryngeal airway of the type that includes an inflatable 10 positioning shield, the shield having a base and a hollow peripheral portion, the method comprising:

introducing polyvinyl chloride onto internal walls of a mold;

wherein the mold has a cavity defined by the internal walls;

wherein the internal walls conform to external walls of the laryngeal

15 airway; and

wherein a minimum amount of polyvinyl chloride is introduced onto the internal walls of the mold that is necessary to create a laryngeal airway having a desired wall thickness; and

allowing the molding material to cure about the internal walls of the mold,

20 thereby forming the laryngeal airway;

wherein the laryngeal airway comprises a base and the base is inserted into the mold prior to introduction of the polyvinyl chloride into the mold and;

wherein the base comprises of a respiratory tube.

30. A method of making a laryngeal airway of the type that includes an inflatable positioning shield, the shield having a base and an inflatable, hollow, peripheral portion, the method comprising:

- introducing polyvinyl chloride onto internal walls of a mold;
- 5 wherein the mold has a cavity defined by the internal walls; wherein the internal walls conform to external walls of the inflatable positioning shield and the respiratory tube, the respiratory tube having a proximal end for attachment to medical devices and a distal end passing through and secured to the rear portion of the positioning shield,
- 10 wherein a minimum amount of polyvinyl chloride is introduced onto the internal walls of the mold that is necessary to create an inflatable positioning shield having external walls about 0.5 millimeters to about 1.5 millimeters thick; and allowing the molding material to cure about the internal walls of the mold, thereby forming the laryngeal airway;
- 15 wherein the laryngeal airway comprises a base and the base is inserted into the mold prior to introduction of the polyvinyl chloride into the mold; and wherein the base comprises a respiratory tube.

31. A method of making a laryngeal airway comprising:

- placing a base into a mold, the mold having a cavity defined by internal walls,
- 20 wherein the internal walls are adapted to produce the external walls of a laryngeal airway that includes an inflatable positioning shield and a respiratory tube, the inflatable positioning shield having an inflatable, hollow peripheral portion in fluid communication with the base, the base having a recessed front portion that is sufficiently pliable to cup a

patient's trachea after inflation of the inflatable positioning shield, a shield recess formed after inflation of the peripheral portion, and a rear portion formed between the base and the peripheral portion after inflation of the peripheral portion, the flexible respiratory tube having a proximal end lumen, a curved tubular body of sufficient size to permit passage 5 of endo-tracheal tubes or related medical instruments therethrough, and a distal end passing through and secured to the rear portion of the positioning shield, the distal end terminating at a distal lumen, the distal lumen passing through and secured to the rear portion of the positioning shield;

introducing at least one molding material onto the internal walls of the mold; and 10 allowing the molding material to cure about the internal walls of the mold to produce the laryngeal airway;

wherein a minimum amount of the molding material is introduced onto the internal walls of the mold that is necessary to create a laryngeal airway having a desired wall thickness.

15 32. A method of making a laryngeal airway of the type that includes an inflatable positioning shield, the method comprising:

introducing at least one molding material onto internal walls of a mold, the internal walls conforming to the external walls of the inflatable positioning shield;

allowing the molding material to cure about the internal walls of the mold, thereby producing the inflatable positioning shield; and

connecting the inflatable positioning shield to the respiratory tube,

wherein a minimum amount of the molding material is introduced onto the internal walls of the molding material that is necessary to create external walls of the inflatable positioning shield.

33. The method of claim 32 wherein the inflatable positioning shield comprises a
5 base and the base is inserted into the mold prior to introduction of the molding material.

34. The method of claim 32 further comprising discarding excess molding
material from the mold.

35. The method of claim 32 wherein the molding material is liquid.

36. The method of claim 32 wherein the molding material is a paste.

10 37. The method of claim 32 further comprising manipulating the mold to
distribute the molding material about the internal walls.

38. The method of claim 32 wherein the molding material is polyvinylchloride.

39. The method of claim 32 wherein the flexible respiratory tube has a proximal
end lumen, a curved tubular body of sufficient size to permit passage of endo-tracheal
15 tubes or related medical instruments, and a distal end passing through and secured to the
rear portion of the positioning shield, the distal end terminating at a distal lumen, the
distal lumen passing through and secured to the rear portion of the positioning shield.

40. The method of claim 32 wherein the mold comprises internal walls that are
adapted to produce an inflatable positioning shield, the inflatable positioning shield
20 having an inflatable, hollow peripheral portion in fluid communication with the base, the
base having a recessed front portion that is sufficiently pliable to cup a patient's trachea
after inflation of the inflatable positioning shield, a shield recess formed after inflation of

the peripheral portion, and a rear portion formed between the base and the peripheral portion after inflation of the peripheral portion.